

Applicants: VanGoor et al.
Application No: 10/800,022

REMARKSAMENDMENTS

Applicants have canceled Claims 1-51, 53, and 56-82; amended Claim 52, 54, 55, 83, and 84; and added Claim 85 and 86. Thus, Claims 52, 54, and 83-86 are currently pending.

Applicants have amended Claim 52 and 55 to delete non-elected subject matter.

Applicants have amended Claim 54 to delete non-elected subject matter and to recite that X_1 is F. Support for this amendment is found on page 28, paragraph [0084], of the Specification.

Applicants have amended Claim 83 to replace the compound numbers with chemical structures.

Applicants have amended Claim 84 to correspond the scope of that claim to the elected subject matter and to correct typographical errors. Support for this amendment is found throughout the Specification.

Applicants have added Claims 85 and 86. Support for these Claims is found in on page 16, paragraph [0047], and [0049], page 17-18, paragraph [0050], and [0055], and page 18-19, paragraph [0057].

None of these amendments adds new subject matter and their entry is respectfully requested.

Applicants: VanGoor et al.

Application No: 10/800,022

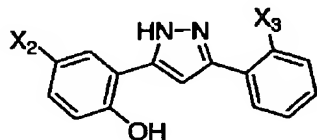
ELECTION/RESTRICTIONS

Applicants affirm the election without traverse of Group II, claims 49 and 52-84, and an election of species of compound IA-6 from page 55 of the specification.

STATUS OF THE CLAIMS

The Examiner has withdrawn Claims 1-48, Claim 49 (in part), Claims 50-51, Claims 52-55 (in part), Claims 56-82, and Claims 83-84 (in part), asserting the subject matter thereof being drawn to a non-elected invention.

The Examiner has restricted the scope of the invention to the following elected subject matter:



where:

X₂ is halogen; and

X₃ is H, halogen, CF₃, and NO₂.

The Examiner has further withdrawn the subject matter of Claim 49, 52-55, and 83-84 as a result of the election.

Applicants have adopted the Examiner's withdrawal of Claims 1-48, Claim 49 (in part), Claims 50-51, Claims 52-55 (in part), Claims 56-82, and Claims 83-84 (in part) and

Applicants: VanGoor et al.

Application No: 10/800,022

amended the claims accordingly to delete therefrom the non-elected subject matter.

CLAIM OBJECTIONS

The Examiner has objected claims 49, 52-55, and 83-84 asserting that these claims recite non-elected subject matter.

As noted above, applicants have amended the claims to delete therefrom the non-elected subject matter. Accordingly, Applicants request that the Examiner withdraw this objection.

The examiner has further objected to claim 83 asserting that this claim uses codes from the specification to identify compounds.

As noted above, applicants have amended the claims to adopt the Examiner's advice on using chemical structures to identify compounds. Accordingly, Applicants request that the Examiner withdraw this objection.

THE REJECTIONS

1. 35 U.S.C. § 112, First Paragraph

The Examiner has rejected Claim 49 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement.

As noted above, Applicants have adopted the Examiner's suggestion to amend Claim 49 to claim a pharmaceutical composition comprising elected compounds and a

Applicants: VanGoor et al.
Application No: 10/800,022
pharmaceutically acceptable carrier. Accordingly,
Applicants request that the Examiner withdraw this
rejection.

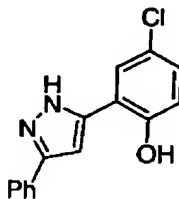
2. 35 U.S.C. § 112, Second Paragraph

The Examiner has rejected Claim 84 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As note above, Applicants have adopted the Examiner's suggestion to amend Claim 84 to recite "a pharmaceutical composition comprising a compound according to any one of claims 52-55." Accordingly, Applicants request that the Examiner withdraw this rejection.

3. 35 U.S.C. § 102(b)

The Examiner has rejected claim 49, 55, and 84 as being anticipated by Kästner et al. (DE 41 26 543 A1, hereinafter "Kästner"). Specifically, the Examiner asserts that



Kästner discloses a compound: and its
pharmaceutical composition which reads on the claims when X₂
is halogen and X₃ is hydrogen.

Applicants respectfully traverse. Applicants have specifically excluded Kästner's compound and its pharmaceutical composition from the claimed invention. Specifically, Kästner's compound and its pharmaceutical

Applicants: VanGoor et al.

Application No: 10/800,022

composition do not read on Claim 52, where X_2 is halogen and X_3 is CF_3 . In addition, Kästner's compound and its pharmaceutical composition have been specifically excluded from Claim 55, which recites "provided that (i) when X_3 is H, then X_2 is not methyl, chloro, or bromo." As a result, Claim 84, reciting the limitation of a compound according to any one of claims 52-55, is not anticipated by Kästner.

Accordingly, Applicants request that the Examiner withdraw this rejection.

4.35 U.S.C. § 103(a)

The Examiner has rejected Claim 49, 52-55, and 83-84 as being unpatentable over Kästner et al. (hereinafter Kästner). Particularly, the Examiner asserted that (1) Kästner teaches generally the compounds of the instant invention; and (2) Kästner teaches the pharmaceutical composition comprising the compounds.

The Examiner further asserted that the motivation to follow the synthetic scheme and make the claimed invention is provided by Kästner's teaching of the use of the synthesized compounds to treat psoriasis. See page 6, lines 28-39.

The following is a quotation of MPEP § 2143 which defines the basic requirements of a *Prima Facie* case of Obviousness:

To establish a *prima facie* case of obviousness three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to

Applicants: VanGoor et al.

Application No: 10/800,022

one of ordinary skill in the art, to modify the reference or to combine reference teachings.

The following is a quotation of MPEP § 2143.01.I. which teaches that "the priority art must suggest the desirability of the claimed invention":

"There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art."

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

The Nature of the Problem to be Solved

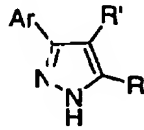
The nature of the problem to be solved in the instant invention is ATP-Binding Cassette ("ABC") transporter mediated diseases. ABC transporters are a family of membrane transporter proteins that regulate the transport of a wide variety of pharmacological agents, potentially toxic drugs, and xenobiotics, as well as anions. ABC transporters are homologous membrane proteins that bind and use cellular adenosine triphosphate (ATP) for their specific activities. See Specification of the instant patent application on page 1, paragraph [003].

Applicants: VanGoor et al.

Application No: 10/800,022

The Teachings of the Prior Art

Kästner, on the other hand, teaches the use of



compounds of the formula as dual inhibitors of Lipoxygenase and Cyclooxygenase.

Kästner on page 6, line 35-39, specifically teaches the use of compounds of the above formula to treat Lipoxygenase-mediated inflammatory diseases, psoriasis being one.

In light of the nature of the problem to be solved by the instant invention, Applicants respectfully submit that Kästner does not suggest explicitly or implicitly the use of applicants' pyrazole derivatives to treat ABC transporter mediated diseases. Kästner, in fact, provides no motivation to employ Applicants' claimed pyrazole derivatives for treating ABC transporter mediated diseases.

Accordingly, Applicants request that the Examiner withdraw this § 103(a) objection.

5. Rejoinder of Claims

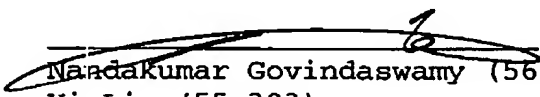
Applicants have amended the claims pursuant to the Examiner's Restriction under 35 U.S.C. § 121. Upon the Examiner's indication that the amended claims are allowable, applicants will seek to rejoin, under MPEP § 821.04, claims directed to methods, wherein the compounds

Applicants: VanGoor et al.
Application No: 10/800,022
employed in the claimed methods will comport to the scope
of the allowed claims.

CONCLUSION

Applicants request that the Examiner enter the above amendments, consider the accompanying remarks, and allow the claims to pass to issue. Should the Examiner deem a telephone discussion expeditious to further the prosecution of the present application, the Examiner is invited to contact the undersigned.

Respectfully submitted,


Nandakumar Govindaswamy (56,285)
Yi Liu (55,393)
Attorney and Agent for Applicants
c/o Vertex Pharmaceuticals
Inc.
130 Waverly Street
Cambridge, MA 02139
Phone: (617) 444-7374
Fax: (617) 444-6483